

**Notice of Allowability**

Application No.

10/021,318

Examiner

Puneet Bhandari

Applicant(s)

GARCIA-LUNA-ACEVES ET AL.

Art Unit

2666

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 06/29/2005.
2. ☒ The allowed claim(s) is/are 54-60,63-67,70-74,80 & 82-86 are allowed (renumbered as 1-23 respectively).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                                    |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>08/31/2005</u> . |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>07/20/2005</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment  |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                                 | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                           |
|  | 9. <input type="checkbox"/> Other _____.   |

## **DETAILED ACTION**

### ***Terminal Disclaimer***

1. The terminal disclaimer filed on 08/26/2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 09/945,106 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John P. O' Banion (Reg. 33,201) on 08/26/2005.

The application has been amended as follows:

Claims 62,75-79 & 81 are cancelled.

In claim 63, line 1 delete "62 or".

In claim 65, line 1 delete "62 or".

In claim 67, line 1 delete " 62 or"

In claim 80, line 1 replace "75" with "54".

### ***Allowable Subject Matter***

3. Claims 54-60,63-67,70-74,80 & 82-86 are allowed (renumbered as 1-23, respectively).

Art Unit: 2666

4. The following is an examiner's statement of reasons for allowance:

Regarding claims **54,66,70 & 82** the prior art of does not explicitly teach the feature determining the direction of congestion by estimating relative delay that one data packet experiences with respect to another data packet as said data packets are transmitted over said network, determining whether congestion is developing in a forward path and isolating forward throughput from congestion occurring on a reverse path. These limitations, in conjunction with all the limitations of independent claims, have not been disclosed, taught or made obvious over prior art of record.

Regarding claims **59 & 74** the prior art of does not explicitly teach the feature determining the direction of congestion by estimating relative delay that one data packet experiences with respect to another data packet as said data packets are transmitted over said network, wherein said source has a congestion window estimating the number of packets which reside in a bottleneck queue from said relative delay and keeping the number of packets in said bottleneck queue at a desired minimum by adjusting the congestion window of the source.

Regarding claims **55-58, 60 & 80**, since these claims further limit claim 54, hence are allowable over prior art of record.

Regarding claims **55-58 & 60**, since these claims further limit claim 59, hence are allowable over prior art of record.

Regarding claims **63-65 & 67**, since these claims further limit claim 66, hence are allowable over prior art of record.

Regarding claims **71-73**, since these claims further limit claim 70, hence are allowable over prior art of record.

Regarding claims **71-73**, since these claims further limit claim 74, hence are allowable over prior art of record.

Regarding claims **83-86**, since these claims further limit claim 82, hence are allowable over prior art of record.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are Qaddoura (US 6,646,987), Yao et al. (US 6,097,697) and Packer (6,445,681).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Puneet Bhandari whose telephone number is 571-272-2057. The examiner can normally be reached on 9.00 AM To 5.30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2666

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Puneet Bhandari  
Examiner  
Art Unit 2666

PB  
\*\*\*

*Seema S. Rao*  
SEEMA S. RAO 9/7/05  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600